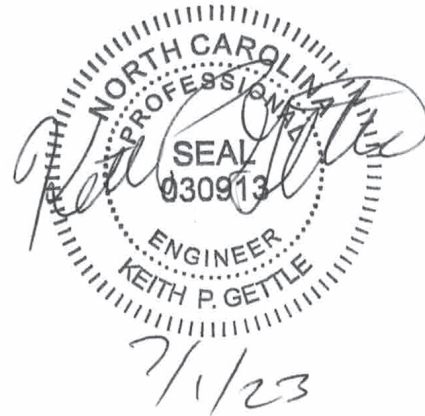


StorageMax
901 Proctor

Zebulon, NC
Wake County

STORMWATER MANAGEMENT ANALYSIS

July 1, 2023



Prepared for:

Robert High Development, LLC
324 Greenville Ave.
Wilmington, NC 28403

StorageMax

Stormwater Management Analysis

Project Name: StorageMax

Project Address: 901 Proctor Ave.
Zebulon, NC

Pins: 2706217463

Latitude: 35.840297
Longitude: -78.315683

Zoning: Heavy Commercial (HC)

River Basin: Neuse

Watershed: Buckhorn

HUC: 03020203

Developer: Robert High Development, LLC
324 Greenville Ave.
Wilmington, NC 28403

Telephone: (919) 604-0505

Email: Storit@AOL.com

Site Description

The project consists of a single parcel located at the intersection of Proctor Avenue and Shepard School Road near downtown Zebulon. The lot is approximately 6.50 acres (283,140 sq feet). The parcel is vacant with grassy vegetation and a woods along the property lines. There is 0 sq ft of existing impervious area on the site. The project will consist of a commercial building and the impervious area post development will be 3.64 acres, or approximately 56% of the gross site.

The site is in the Neuse River Basin, Buckhorn Watershed and subject to those rules regarding nutrient management and post storm water runoff.

The parcel is not located within a flood zone as noted per FEMA map 372020600J, Dated May 2, 2006.

Based on the Wake County SCS soils map (attached) the onsite soils are primarily Appling Series (ApB2), soil group B, throughout the tract. The Appling Series soil type is considered to have fair infiltration and surface runoff medium based on information in the Soil Survey.

Seasonal High Water Table (SHWT)

Noted in Zebulon's regulations.

"Separation from seasonal high water table. For BMPs that require a separation from the seasonal high-water table, the separation shall be provided by at least 12 inches of naturally occurring soil above the seasonal high-water table."

A soils investigation was done to determine the SHWT and the results attached in the report from Protocol Sampling Services, Inc. Based on the noted report the SHWT is approximately elevation 307 and is below the 1-foot separation from the bottom of the BMP as required in the Town of Zebulon's regulations.

Proposed Development

The stormwater analysis considers a proposed development that will include commercial buildings on the site.

The proposed stormwater facility for the project will consist of one Bioretention device. Drainage from the majority of the property will be collected within the storm pipe system, surface drainage and routed towards the BMP. The device is designed in accordance with NCDENR DWR's BMP Manual, and will manage the 1, and 10 year, 24-hour storm events as noted below. The post development runoff from the noted storm events is less than the pre-development rates for the site.

The proposed BMP will capture the runoff from the majority of impervious area from the lot. However, a small portion of the site impervious, at the driveway entrance, does not drain towards the device; however, the device has been designed to treat all the impervious area as a part of the WQV. The total impervious associated with the development has been accounted for treatment within the Bioretention device.

Methodology (Peak Flow and Nutrient Management)

The project is located within the Town of Zebulon's / Wake County permitting authority, and within the Neuse River / Buckhorn watershed and the project is subjected to those rules. The Town of Zebulon's stormwater requirements as noted below.

The project is considered a High-Density project.

“(D) Development standards for high-density projects. High-density projects shall implement stormwater control measures that comply with each of the following standards, in addition to the general standards found in § 151.36.

(1) The measures shall control and treat runoff from the first inch of rain. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.

(2) All structural stormwater treatment systems used to meet these requirements shall be designed to have a minimum of 85% average annual removal for total suspended solids (TSS).

(3) All development and redevelopment projects shall provide permanent on-site BMPs to lower the nitrogen export amounts as part of the stormwater management plan and accompany the land-disturbing plan submittal. BMPs are to be in accordance with and as specified in the Design Manual.

(4) Structural and non-structural BMPs shall be used to ensure there is no net increase in peak flow leaving the site from the pre-development conditions for the one-year, 24-hour storm. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.

(5) General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c), as explained in the Design Manual.

(6) All development and redevelopment shall be located outside the riparian buffer zone and the flood protection zone. These zones shall be in accordance with the following provisions:

(a) Except where other applicable buffer standards are more restrictive, the riparian buffer zone shall extend a minimum of 50 feet landward of all perennial and intermittent surface waters. The most restrictive standards shall apply.

(b) The riparian buffer zone shall remain undisturbed unless otherwise permitted by this section.

(c) The flood protection zone shall extend throughout the FEMA 100-year floodplain as identified on the current Flood Insurance Rate Map (FIRM) published by FEMA. The flood protection zone shall remain undisturbed unless otherwise permitted by this section.

(d) No development or redevelopment is permitted within the riparian buffer zone or the flood protection zone except for stream bank or shoreline restoration or stabilization, water dependent structures, and public or private projects such as road crossings and installations, utility crossings and installations, and greenways, where no practical alternatives exist.

(e) Permitted activities within the riparian buffer zone and the flood protection zone shall minimize impervious coverage, direct runoff away from surface waters to achieve diffuse flow, and maximize the utilization of non-structural BMPs.

(f) Where the riparian buffer zone and the flood protection zone both are present adjacent to surface waters, the more restrictive shall apply.

(7) The approval of the stormwater permit shall require an enforceable restriction on property usage that runs with the land, such as recorded deed restrictions or protective covenants, to ensure that future development and redevelopment maintains the site consistent with the approved project plans. Buffer widths and locations shall be clearly delineated on all plans, final plat, and as-builts.”

Peak flow – The methodology used to determine the runoff is the Rational Method.

Time of Concentration used in the analysis is 5 minutes.

The POI (point of interest) for the project is at the southwest corner of the site

Based on the proposed stormwater management for the project no adverse impact is anticipated on adjacent parcels. The BMP system and drainage point from the project does encroach on another property with new development and grading operations. The impacted property is owned by the same company involved with this project.

Using the Rational Method, the modeling of the BMP at the POI provides the following results in peak flow management.

Total site peak runoff in cfs (noted in the attached Hydraflow report) is as follows.

Storm Event	Pre	Post
Q1	6.2	.81
Q10	22.53	20.60

Nutrient Management

The BMP provides treatment for drainage area within the project and also provides the TSS removal of 85%.

O&M Manual

A copy of the project's O&M manual is attached for the Bioretention device.

Flood Hazard Area (Soils)

There are Flood Hazard Soils located on site (see attached GIS map) and are located within the stream buffered area. No grading or development is planned within the NRB area.

Q100 Backwater Effect at BMP (13. Z Wake County Checklist)

There is no storm pipe from the project that will discharge into the ROW. The BMP discharges directly into a stream on the southern portion of the project site.

Downstream Impact Analysis (DIA)

The Town of Zebulon requires a DIA to be performed with the 10% rule.

(A) *Downstream impact analysis.*

(1) *The downstream impact analysis must be performed in accordance with the "10% rule," and a copy of the analysis must be provided with the permit application. The purpose of the downstream impact analysis is to determine if the project will cause any impacts on flooding or channel degradation downstream of the project site. The analysis must include the assumptions, results and supporting calculations to show safe passage of post-development design flows downstream. This analysis shall be performed at the outlet(s) of the site, and downstream at each tributary junction to the point(s) in the conveyance system where the area of the portion of the site draining into the system is less than or equal to 10% of the total drainage area above that point.*

(2) *The typical steps in the application of the 10% rule are:*

(a) *Using a topographic map, determine the point downstream where the proposed site equals 10% of the total drainage area, called the 10% point. Identify all tributary junctions between the downstream site boundary and the 10% point. All points identified, as well as the outlet of the site, are known as 10% rule comparison points.*

(b) *Using a hydrologic model with existing land uses, determine the pre-development peak runoff rate (cfs) for the ten-year design storm event at each comparison point.*

(c) *Insert the proposed site design and proposed BMPs into the land uses and determine the post-development peak runoff rate for the ten-year design storm at each comparison point.*

(d) *If the post-development peak discharge rate is equal to or less than pre-development conditions at all comparison points, no further analysis is required.*

(e) *If the ten-year post-development peak discharge rate is greater than the pre-development peak discharge rate at any comparison point, then one of the following actions must be taken:*

Results

The POI is located downstream from the parcel and as shown on the attached GIS maps there are two farm ponds prior to the evaluated stream ditch. See attached for supporting calculations.

The evaluated area is approximately 77.87 acres and site encompass 6.5 acres. Areas used to determine the pre-development CN are as follows.

- Impervious = 11.25 ac
- Grass = 33.62 ac
- Woods = 33 ac
- CN used for predevelopment calculations is .32
- Tc of 5 minutes

Flow rate is 179.83 cfs.

Removing the site area from the total is $77.87 - 6.5 = 71.37$ acres

- Impervious = 7.65 ac
- Grass = 33.00 ac
- Woods = 32.82 ac
- CN used for predevelopment calculations is .29
- Tc of 5 minutes

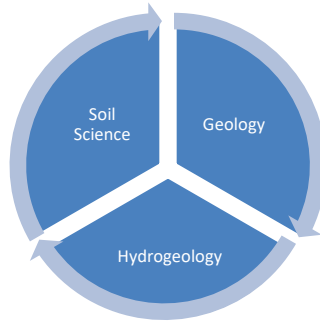
Flow rate is 149.37 cfs.

Incorporating the Q10 flow rate after the BMP is 20.60 cfs.

Total Post flow at the POI is $149.37 + 20.60 = 169.97$ cfs.

Incorporating the BMP the post runoff from the development of the project will reduce the peak stormwater runoff to below the predevelopment standards. As a result, the post stormwater runoff increase is less than 10% on adjacent properties.

Attachments.



4114 Laurel Ridge Drive
Raleigh, North Carolina 27612

Protocol Sampling Service, Inc.
“Experts in Environmental Compliance”

(919) 210-6547

Protocolsampling@yahoo.com
Environmentalservicesnc.com

May 31, 2023

Mr. Keith P. Gettle, P.E.
Gettle Engineering & Design, PLLC
3616 Waxwing Court
Wake Forest, North Carolina 27587

Re: **Storm Water Management Soil Investigation
Storage Max
901 Proctor Street
Zebulon, Wake County, North Carolina
Protocol Project #23-67**

Dear Mr. Gettle:

The following Soil Investigation is submitted to assist in a site assessment for storm water management improvements for a Storage Max facility located at 901 Proctor Street in Zebulon, Wake County, North Carolina.

SITE HISTORY AND PHYSICAL CHARACTERISTICS

The subject property was formerly occupied by a residential structure and is now pasture. Light residential development and farmland surrounds the subject property. Protocol Sampling Service, Inc. of Raleigh, North Carolina was hired to perform an investigation to identify the depth to seasonal high-water table in the location of the proposed storm water Bioretention BMP.

SOIL INVESTIGATION

The field survey was conducted on Wednesday May 31, 2023. One (1) soil boring was advanced in the center of the proposed Bioretention BMP to a depth of 60-inches below land surface (bls) with a hand auger (Site Plan – attached). Soil color was determined with a Munsell Soil Color Chart. The presence of fill or other disturbances, the depth to the seasonal high-water table, soil structure and consistence were noted. The boring was also checked for reduced colors, an anaerobic smell or obvious soil wetness.

FINDINGS - Soil

- The proposed Bioretention Basin is located on the southern section of the property and was found to have an apparent depth to seasonal high-water table of 46-inches bls.
- Saprolite (weathered rock) was encountered at a depth of 50-inches bls in the proposed Bioretention Basin. Ground water was not encountered in the soil boring.

- A seasonal high-water table of 3.83-feet bls should be considered the depth to SHWT at an elevation of 307.17' (311.00' estimated surface elevation) with a depth to rock and groundwater of greater than 6-feet bls.

The findings presented herein are based on the site conditions observed during performance of the field survey on May 31, 2023.

Please call me at (919) 210-6547 if you have any questions or need further assistance.

Sincerely,
Protocol Sampling Service, Inc.



David E. Meyer, N.C.L.S.S.
President



cc: file

Storage Max
Soil Profile Description – Durham

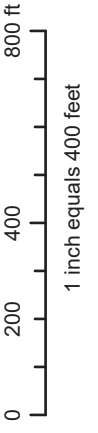
Soil Profile Description

- A1 0-9 inches; grayish brown (10YR 5/2) loamy sand; granular structure, very friable
- A2 9-15 inches; brown (10YR 5/3) loamy sand; granular structure, very friable
- Bt1 15-33 inches; strong brown (7.5YR 5/8) sandy clay loam; subangular blocky structure; friable
- Bt2 33-50 inches; brownish yellow (10YR 6/6) clay loam; subangular blocky structure; friable
- C 50-60 inches; gray and black sandy loam saprolite

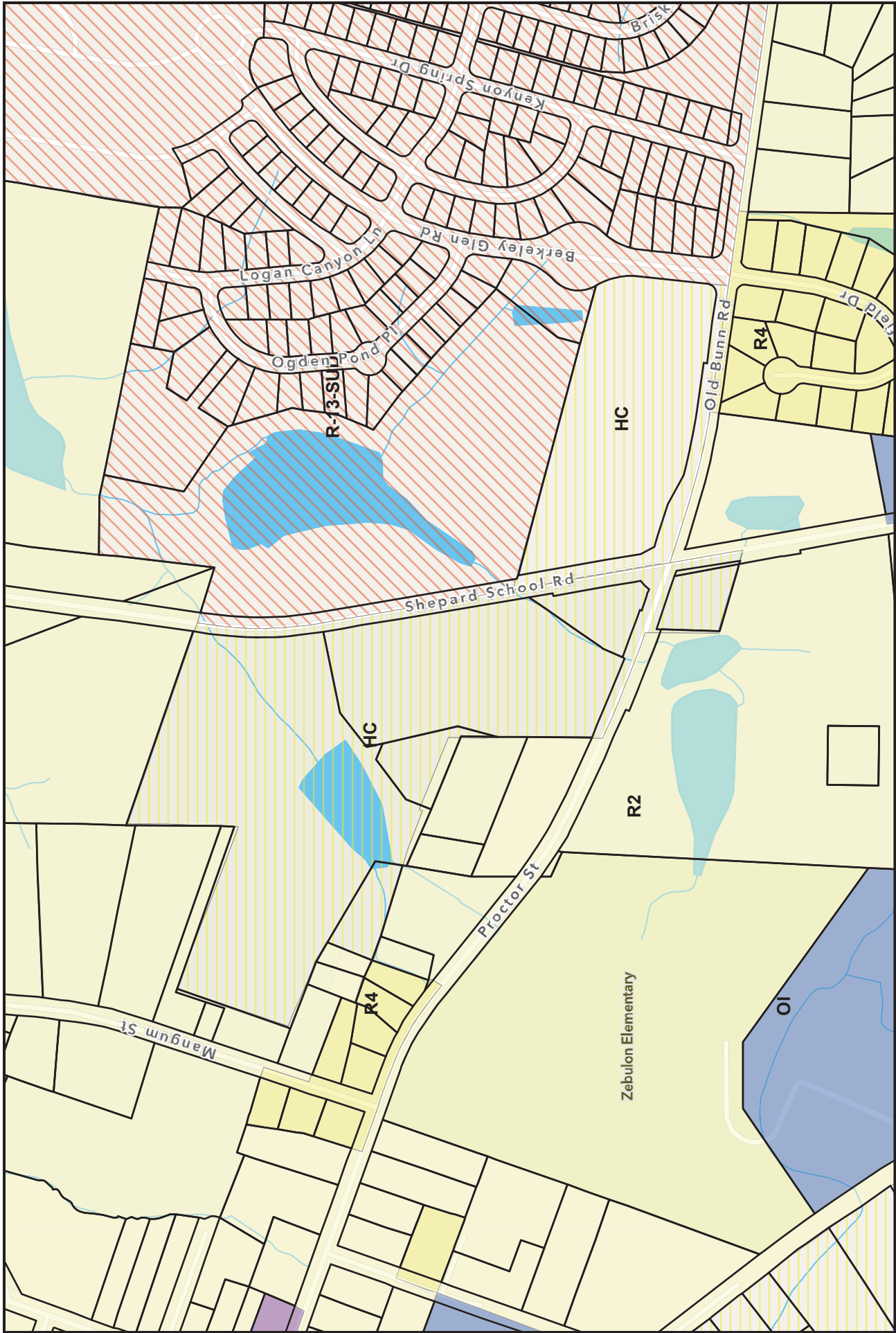
Soil Series: Durham
Landscape: Piedmont
Landform: upland divide
Parent Material: Gneiss & schist
Drainage Class: Well drained
Particle Size Class: clay
Temperature Regime: thermic
Subgroup Classification: thermic Typic Hapludult
Examination Method: auger boring
Date: May 31, 2023
Weather: 75° and sunny
Investigator: David Meyer
Shwt: 46”
Measured water table depth: >60”



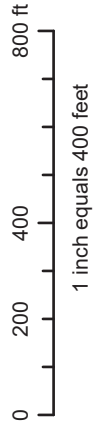
Site Map GIS



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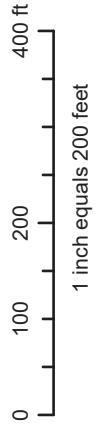
Site Zoning



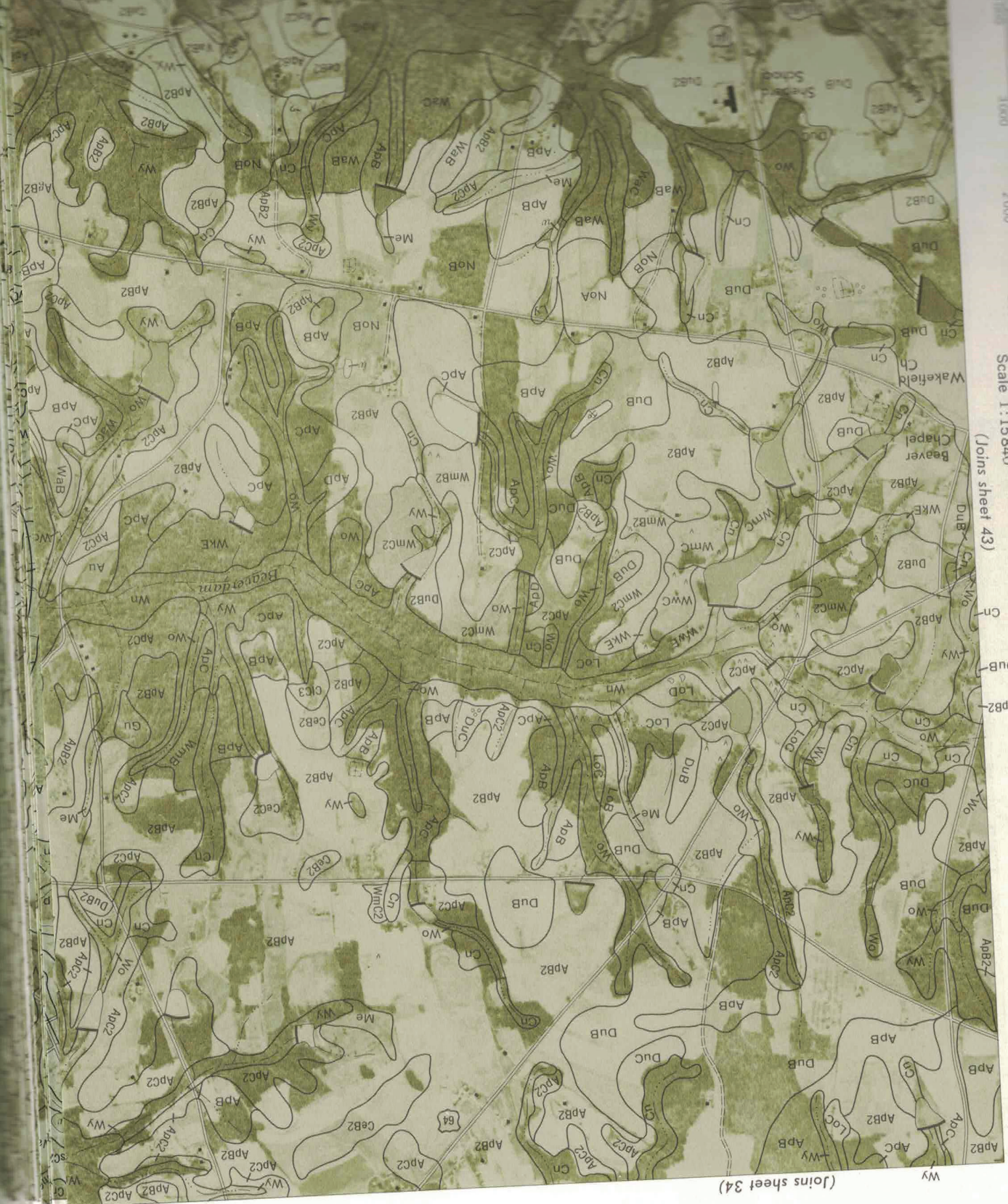
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Aerial Map



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Scale 1:15840

(Joins sheet 43)

5000 Feet

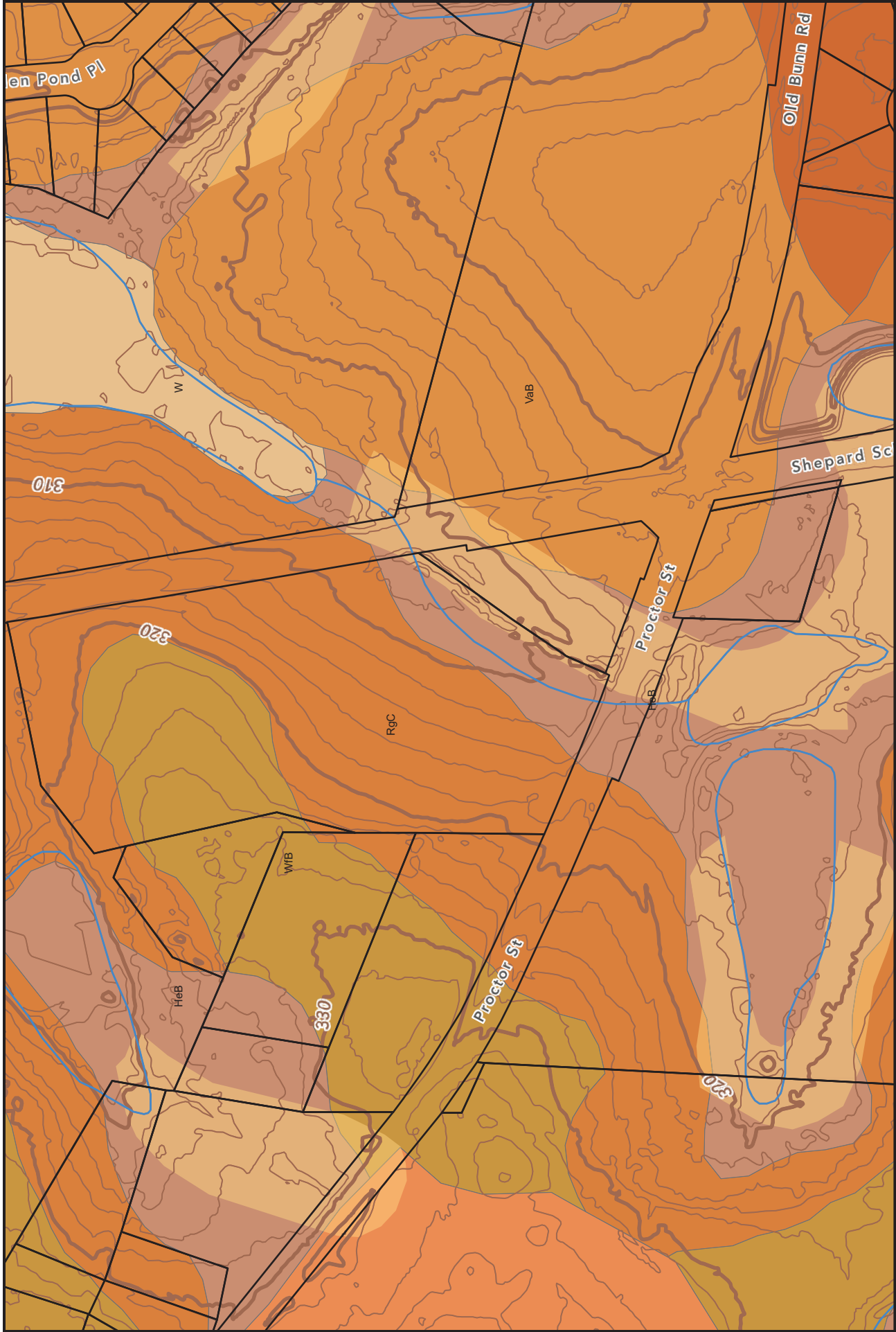
1 Mile



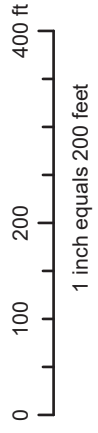
44

(Joins sheet 34)

WAKE COUNTY, NORTH CAROLINA



Flood Prone Soils



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National Flood Hazard Layer FIRMette

78°19'17"W 35°50'35"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth
Zone AE, AO, AH, VE, AR
- Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
Zone X

Future Conditions 1% Annual Chance Flood Hazard
Zone X

Area with Reduced Flood Risk due to Levee. See Notes.
Zone X

Area with Flood Risk due to Levee
Zone D

OTHER AREAS OF FLOOD HAZARD

NO SCREEN
Zone X

Area of Minimal Flood Hazard
Zone X

Effective LOMR
Zone D

Area of Undetermined Flood Hazard
Zone D

OTHER AREAS

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

OTHER FEATURES

Digital Data Available

No Digital Data Available

Unmapped

MAP PANELS

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

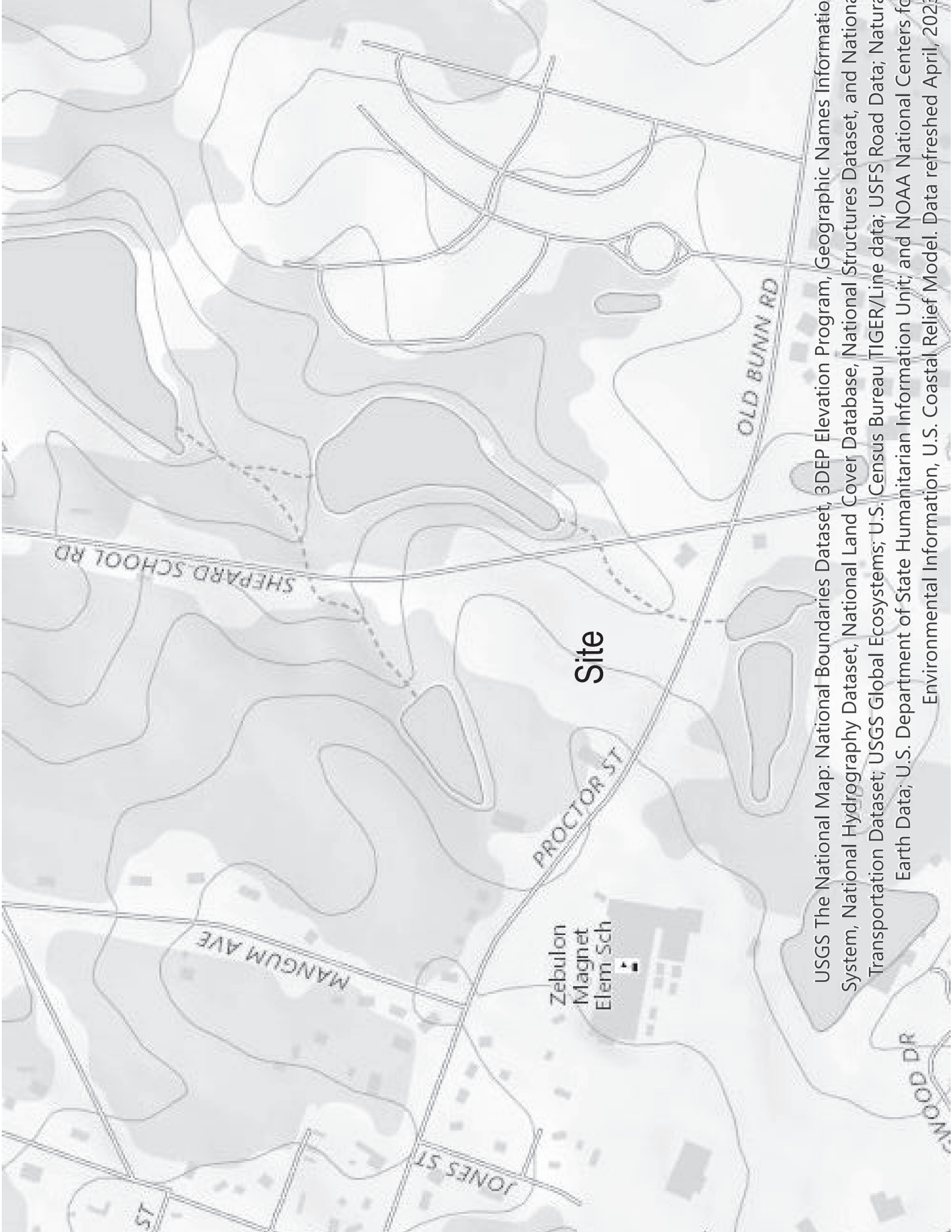
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **6/2/2022 at 8:36 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



0 250 500 1,000 1,500 2,000 Feet 1:6,000
 Basemap: USGS National Map; Data refreshed October, 2020
 78°18'40"W 35°50'6"N



Site

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

Stormwater Summary

	Square Feet	Acres
Overall Site Gross Area	283,140.00	6.50
ROW Shepard	12,756.00	0.29
ROW Proctor	2,569.00	0.06
Site (Net)	267,815.00	6.15
Pre Development		
Impervious	0.00	0.00
Managed Pervious	283,140.00	6.50
Total		6.50
Post		
Parking Lot / Sidewalk Site	52,685.00	1.21
Roof	106,000.00	2.43
Open Landscape	109,130.00	2.51
Total	267,815.00	6.15

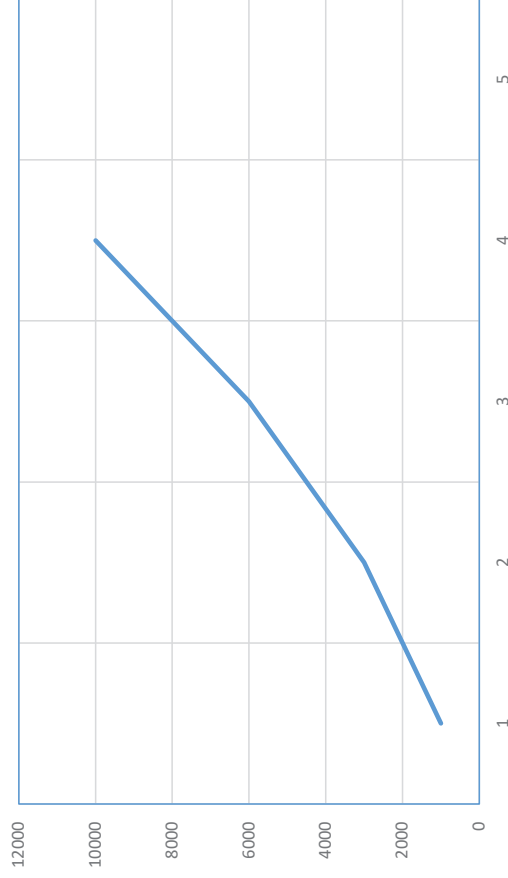
Calculate Stage-Storage of Bioretention Basin

Stage	Contour	Contour Area (sf)	Incremental Volume (cf)	S, Accumulated Volume (cf)
0.0	0	14,465	0	0 Top of Media = 311
1.0	1	13,274	13,870	13,870 E/310
2.0	2	12,116	12,695	26,565 E/309

Water Volume

0.0	311	14,465	0	0 Top of Media
1.0	312	16,310	15,388	15,388 1" storm volume pool elevation
1.5	312.5	17,254	8,391	23,779 Top of Riser
2.0	313	18,213	8,867	32,645 Emergency Spillway
2.0	-	-	(2,850,335)	-2,817,689 Top Of Dam

S, Accumulated Volume (cf) by Stage



Calculate the runoff coefficient, Rv

Impervious portion of drainage area	3.64 acres
Drainage area	4.87 acres
IA	75%
Rv	0.72

$I_A = (\text{Impervious portion of drainage area (acre)})$
 $R_v = 0.05 + 0.9 \times I_A$

Calculate the volume of runoff to be controlled, V

RD	1 inch	Design storm rainfall depth
----	--------	-----------------------------

19.51

A	4.87 acres	Watershed area
V required	12,776 cf	$V = 3630 \times R_D \times R_v \times A$
V provided	15,388 cf	

Underdrain

Media Volume	26,565 cu ft	1" / hour (safety factor of 10)
Q (1" /hr)	3.07 cfs	Diameter of pipe
D	12.09 in	Roughness factor
n	0.011	internal slope
s	0.005 ft/ft	See table 5-1
# of Pipes Req'd	5 (6" pipes req)	

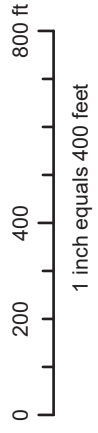
Table 5-1 (From Section 5.7 BMP Manual)

if D is less than	# of 4" pipes	if D is less than	# of 6" pipes
5.13	2	7.84	2
5.95	3	9.11	3
6.66	4	10.13	4
7.22	5		
7.75	6		
8.2	7		

Downstream Impact Analysis



10% Evaluation Aerial



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COMPOSITE RUNOFF COEFFICIENTS

Pre - DEVELOPMENT 10%DIA

PROJECT: Project Name Zebulon StorageMAX
LOCATION: Zebulon, NC
DATE:
DESCRIPTION: 10% DIA

RUNOFF COEFFICIENT

ZONE	LAND COVER	AREA (Ac)	C-VALUE	% OF TOTA	C _{increment}
1	Impervious	11.250	0.95	14.4%	0.137
2	Grass	33.620	0.22	43.2%	0.095
3	Woods	33.000	0.20	42.4%	0.085
		77.870		100.0%	

Square Feet = 3,392,017

C_{composite} = 0.32

COMPOSITE RUNOFF COEFFICIENTS

Post - DEVELOPMENT 10%DIA

PROJECT: Project Name Zebulon StorageMAX
LOCATION: Zebulon, NC
DATE:
DESCRIPTION: 10% DIA

RUNOFF COEFFICIENT

ZONE	LAND COVER	AREA (Ac)	C-VALUE	% OF TOTA	C _{increment}
1	Impervious	7.650	0.95	10.4%	0.099
2	Grass	33.010	0.22	44.9%	0.099
3	Woods	32.820	0.20	44.7%	0.089
		73.480		100.0%	

Square Feet = 3,200,789

C_{composite} = 0.29

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

1 - 10% DIA Pre Development



2 - Post w/o StorageMax Site



Legend

<u>Hyd.</u>	<u>Origin</u>	<u>Description</u>
1	Rational	10% DIA Pre Development
2	Rational	Post w/o StorageMax Site

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	Rational	-----	-----	-----	-----	-----	179.83	-----	-----	-----	10% DIA Pre Development
2	Rational	-----	-----	-----	-----	-----	149.37	-----	-----	-----	Post w/o StorageMax Site

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

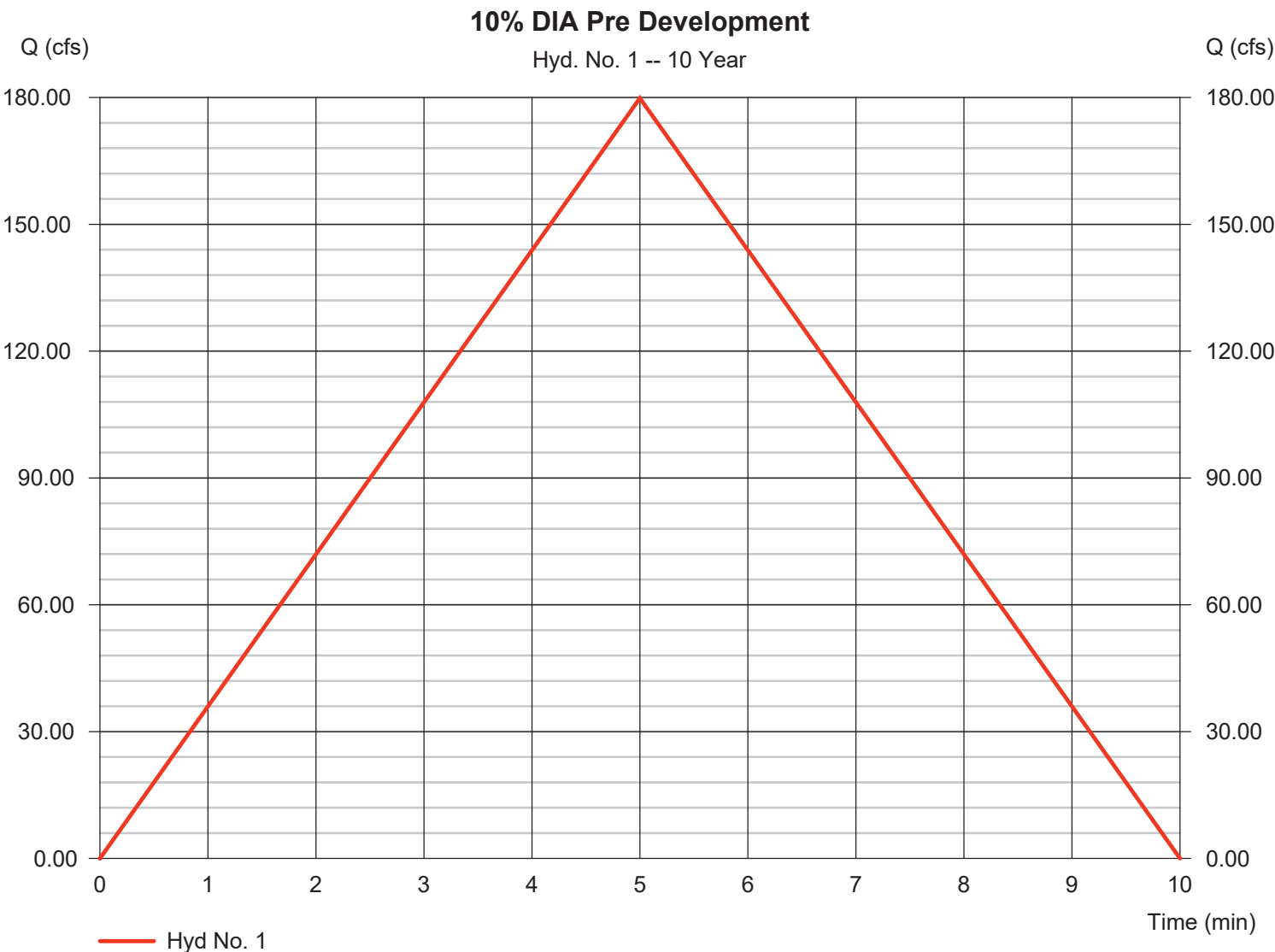
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	179.83	1	5	53,950	-----	-----	-----	10% DIA Pre Development
2	Rational	149.37	1	5	44,811	-----	-----	-----	Post w/o StorageMax Site
<p>C:\Users\keith\Documents\GED\Hydraflow\Zebra\10% DIA.gpw</p>									<p>Friday, 06 / 30 / 2023</p>

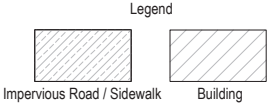
Hydrograph Report

Hyd. No. 1

10% DIA Pre Development

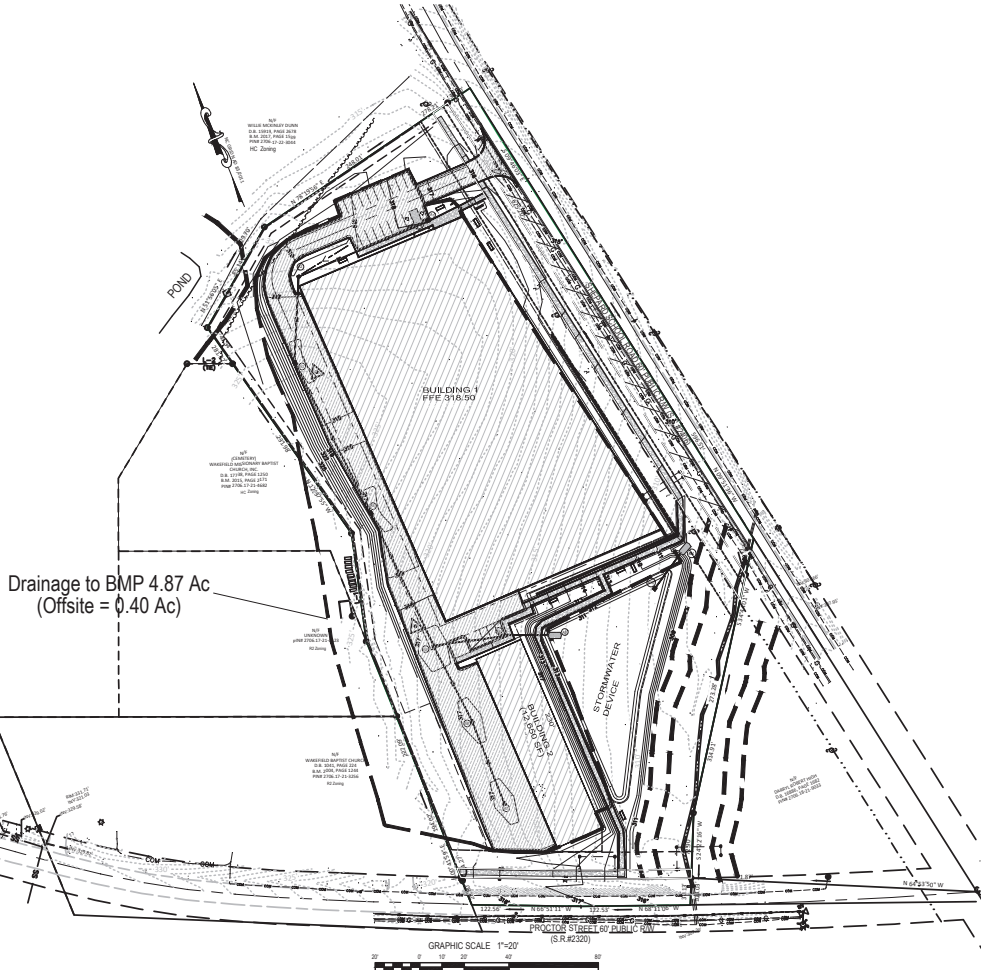
Hydrograph type	= Rational	Peak discharge	= 179.83 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 53,950 cuft
Drainage area	= 77.870 ac	Runoff coeff.	= 0.32
Intensity	= 7.217 in/hr	Tc by User	= 5.00 min
IDF Curve	= Raleigh-2002.IDF	Asc/Rec limb fact	= 1/1





Stormwater Summary

	Square Feet	Acres
Overall Site Gross Area	261,142.00	6.92
ROW (Shoulder)	12,796.00	0.29
ROW (Road)	29,659.00	0.66
Site (P&I)	218,687.00	5.97
Pre-Development	0.00	0.00
Impervious	261,142.00	6.92
Managed Impervious	0.00	0.00
Total	261,142.00	6.92
Post		
Parking/Land (Shoulder Site)	52,096.00	1.21
Roof	106,000.00	2.43
Open Landscape	103,046.00	2.51
Total	261,142.00	6.92



Gettle Engineering and Design, PLLC

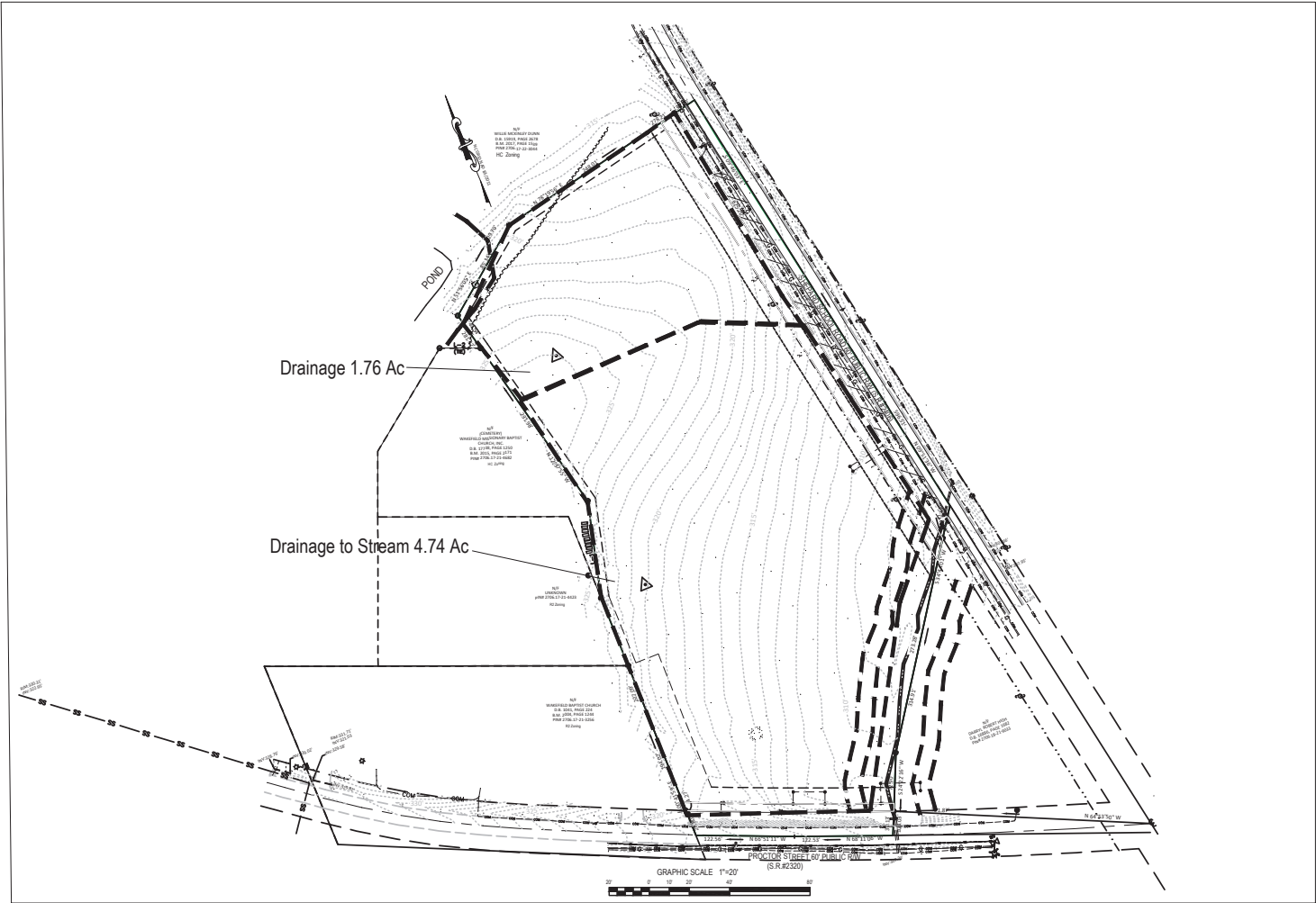
2616 Waxwing Court
Wake Forest, North Carolina 27687
(919) 210-3904 Firm License P-2538

REV	DATE	DESCRIPTION
1	01/15/2021	ISSUED FOR PERMIT
2	01/15/2021	ISSUED FOR PERMIT
3	01/15/2021	ISSUED FOR PERMIT
4	01/15/2021	ISSUED FOR PERMIT
5	01/15/2021	ISSUED FOR PERMIT
6	01/15/2021	ISSUED FOR PERMIT
7	01/15/2021	ISSUED FOR PERMIT
8	01/15/2021	ISSUED FOR PERMIT
9	01/15/2021	ISSUED FOR PERMIT
10	01/15/2021	ISSUED FOR PERMIT
11	01/15/2021	ISSUED FOR PERMIT
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27	01/15/2021	ISSUED FOR PERMIT
28	01/15/2021	ISSUED FOR PERMIT
29	01/15/2021	ISSUED FOR PERMIT
30	01/15/2021	ISSUED FOR PERMIT

PRELIMINARY
DO NOT USE FOR
CONSTRUCTION

Drainage / Impervious Map
StorageMax
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 22001
Dwg No. **EX1**



Gettle Engineering and Design, PLLC

3616 Waxwing Court
 Wake Forest, North Carolina 27157
 (919) 210-3934 Firm License P-2358

Drainage Map (Pre)
 StorageMax
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 22001
 Dwg No. EX2

DATE	DESCRIPTION	BY	CHK
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML
08/11/2021	ISSUED FOR PERMIT	JL	ML

PRELIMINARY
 DO NOT USE FOR
 CONSTRUCTION